not formed by a regular groove, as the upper are, but have all the characters of such scratches as would be formed on a stone by sharpening knives or other edged tools.

Fig. 4.

Fig 5.

Fig. 5 is of sandstone, rudely chiselled on the faces and sides, and roughly rounded on the corners of the back, the back itself being flat. It is two feet eight inches high; eleven inches and a-half at the broadest part, and about seven inches thick. In shape it has a rude resemblance to the ordinary form of a coffin. The letters are distinct grooves, but they do not appear to be all of the same age, as some are very evidently new or recent, and, as in Fig. 3, very similar to the scratches formed by sharpening tools.

The Cork Institution is indebted to the zeal of Messrs. Windele and Abel for these valuable Ogham stones.

Dr. Apjohn read a notice, by the Rev. Thomas Knox, on Cyanogen, as a Food for Plants.

Liebig having proved in his work on Agricultural Chemistry that the nitrogenous compounds of vegetables are derived principally from the decomposition of ammonia, and that the carbon is derived from the carbonic acid of the atmosphere, it occurred to me to try (while experimenting on some manures) whether a source of each might not be found in some salt of cyanogen ($c_2 n$). This, I think, the following facts will make probable. The salt I used for this purpose was the ferro-cyanuret of potassium,

$$(K_2 Cfy = C_6 N_3 + Fe + K_2.$$

EXPERIMENTS.

A piece of grass was selected in the garden, as being as even and equal as possible, and five plots were marked out on it, side by side, each containing exactly ten square yards; they were marked out by pegs in the corners, and a line put round each while the salts were putting on, and during the cutting of the grass. They were then manured as follows, on the 17th of June last:

No. 1. Muriate of Ammonia, 3 oz.
2. Aqua Ammonia of the shops, ½ a pint; with Linseed Oil, 4 pints.
3. Nothing.
4. *Yellow Prussiate of Potash*, 3 oz. In the usual state, as sold by druggists, in crystals.
5. { Phosphate of Soda, 1½ oz.
Pearl Ash, 3 oz.
Sulphate of Magnesia, 1½ oz.
Carbonate of Ammonia, 3 oz.

The salts on these two last plots were not laid on till the 26th of June, which gave them a slight disadvantage. They were all mown on the 25th of September, and weighed fresh the moment they were cut, when the weights were as follows:

No. 1.	$23\frac{3}{4}$ lbs.	when dry	$7\frac{1}{2}$ lbs.
2.	19	,,	$5\frac{1}{2}$
3.	$21\frac{1}{2}$	,,	$6\frac{1}{4}$
4.	$32\frac{1}{2}$	,,	$9\frac{1}{2}$
5.	$28\frac{1}{2}$	,,	$8\frac{3}{4}$

I cannot depend on the dry weight, nor draw any conclusions from it, though it follows nearly the same proportion as the fresh grass; the weather had been very wet, and it had been left too long exposed to it.

The great advantage of the plot manured with the prussiate of potash over the others is very remarkable; for about a month it seemed rather inferior to that manured with the muriate of ammonia; but after that time the difference became very perceptible to the eye or foot.

The final advantage of No. 4 above No. 1 is at the rate of 38 cwt. of fresh grass, or $8\frac{1}{2}$ cwt. of dry grass to the acre. The reason of this superiority cannot arise from the nitrogen alone, as the quantity of *it* in the three ounces of muriate of ammonia (applied to No. 1) actually exceeds that in the three ounces of ferro-cyanuret of potassium, in the proportion of 13 to 11. It must, therefore, be sought for in the other elements of the salt.

Supposing this salt to be absorbed by the plant, and decomposed in the same manner as the ammoniacal salts, the plant will then obtain *carbon* and *potash,* as well as the *nitrogen,* in the nascent state, which seems to be the only way in which *carbon* can be assimilated. In fact almost every element required by the plant is contained in this one compound, and obtained by one and the same decomposition.

I beg leave to lay these facts before the Academy, as they may prove interesting to those engaged in the subject of manures, and may tend to throw a little further light on the subject of the food of plants, should they be confirmed on repetition; but I fear they can be of no service to the practical agri-

culturist, from the high price of all the compounds of cyanogen.

Mr. George Yeates read a paper containing the results of a Meteorological Journal for the year 1843.—*See* Appendix V.

The Rev. H. Lloyd communicated a letter written many years ago to his father, the late Dr. Lloyd, Provost of Trinity College, by Mr. Mac Cullagh, who was then a Fellowship-Candidate in the College. It relates principally to a mechanical theory (that of the rotation of a solid body) which Mr. Mac Cullagh was occupied with at that period, and which he had occasion to allude to at the last meeting of the Academy. The following is an extract from the letter. The beginning and the date are wanting.

" THEOREM I.—If a rigid body, not acted on by any extraneous forces, revolve round a fixed point O, and if an ellipsoid be described having its semiaxes in the direction of the principal axes passing through O, and equal to the radii of gyration round them ; then a perpendicular to the invariable plane being raised from O to meet the surface of the ellipsoid in I, the line OI (which is fixed in space, as the ellipsoid revolves with the body) will be of a constant length during the motion ; and a perpendicular from O upon the plane which touches the surface at I, will always be the axis of rotation, and will vary inversely as the angular velocity.

" *Corollaries.*

" 1. Since every radius which is nearly equal to the greatest or least semiaxis of an ellipsoid must lie near that semiaxis, it appears that if, in the beginning of the motion, the point I be near the vertex of either of these semiaxes, it will always be near it, since OI remains constant ; and therefore, by the preceding construction, the axis of rotation will always remain near the same semiaxis. Hence the rotation about the axes of greatest and least moment in any body is stable. The rotation about the axis of mean moment is unstable, because the radii of an ellipsoid, which are nearly equal to the mean semiaxis, do not all lie near that semiaxis.